THREE NEW SPECIES OF PLASTOCERINÆ WITH NOTES CONCERNING OTHERS

(Coleoptera, Elateridæ)
BY KENNETH D. SLOOP
University of California

During the past several years some interesting data have been accumulated regarding the *Plastocerinæ*. It seems advisable to make this information known at this time along with the description of three species new to science.

Plastocerus maclayi Sloop, new species

Elongate, head and thorax black, elytra brown. Head closely, coarsely punctured, somewhat cribrate; antennæ extending beyond hind angles of prothorax to basal one-fifth of elytra, median antennal processes six times as long as segment, basal processes five times as long as segment. Eye small, sub-hemispherical. Front only slightly convex, clypeus subtruncate, head covered with long whitish pile. Pronotum as long as broad, closely, coarsely punctuate; entire surface covered with long rufous pile. Hind angles short, carinate, acute and strongly divergent; lateral margins strongly arcuate, somewhat expanded in front of middle. Scutellum entirely finely punctate. Elytra slightly more than three times as long as broad; entire surface densely covered with rufous pile. Striæ well impressed, intervals convex and sparsely punctate especially on disk; sides parallel for first two-thirds then gradually narrowing to apex. Legs and ventral surface brown, clothed with short recumbent, rufous pile. Length 13 mm., width 3 mm.

Holotype, male (No. 3928, C. A. S. Ent.), collected near Palmdale, California, July 18, 1934, from the California Juniper, *Juniperus californica* Carr, by Mr. A. T. McClay, who very kindly presented the specimen to me for study and to whom I dedicate this fine species. There is one designated paratype in the collection of the California Academy of Sciences, taken by Mr. Thomas Craig at Little Rock Dam, Los Angeles County, California, June 19, 1927.

P. maclayi in Dr. Van Dyke's table runs to P. amplicollis Van Dyke. It may be compared with amplicollis as follows: the antennæ in maclayi extend beyond the hind angles of the prothorax while in amplicollis they do not reach the hind angles;

¹ Van Dyke, E. C., 1932, Proc. Calif. Acad. Sci., Ser. 4, XX, p. 457,

the median processes of the antennæ are about six times as long as the segments while in amplicollis they are four times the length of the segments, the eyes are much smaller than in amplicollis, the thorax has a short subangulate wing on the sides slightly in front of the middle, in amplicollis the sides are suddenly expanded in front into two truncate, wing-like processes; the elytra are gradually rounded from middle to apex, while in amplicollis the elytra are suddenly rounded at apex. P. maclayi is readily separated from P. schaumi Lec., by the longer antennæ, longer antennal processes, and the expanded sides of the thorax. In schaumi the sides of the thorax are suddenly arcuate at middle.

Plastocerus pullus Sloop, new species

Elongate, thorax and elytra black. Head closely, cribrately punctured, antennæ extending almost to hind angles of thorax, median antennal processes, black, slightly more than four and one-half times as long as segments, eyes small, sub-hemispherical. Front convex, clypeus sub-arcuate; entire head clothed with long erect pile. Thorax slightly broader than long, densely clothed with long, erect, rufous pile, coarsely, cribrately punctured; the sides abruptly expanded in front of middle into a short arcuate wing-like process; hind angles divergent, feebly carinate and acute. Scutellum cribrately punctured and densely clothed with Elytra nearly three times as long as broad, striæ rufous pile. not well impressed; intervals convex, finely sparsely punctate. Sides parallel for first two-thirds thence gradually rounding to apex. Ventral surface black and shining, clothed with short, whitish, recumbent pile; legs black, tarsi rufous. Length 11 mm., width 3 mm.

Holotype, male (No. 3929, C. A. S. Ent.), and five paratypes (in the colection of the author) all collected in May, 1926 and 1927 at Santa Paula by Mr. A. S. Harrison, who kindly permitted me to study the specimens.

P. pullus may be easily separated from P. amplicollis Van D. and P. schaumi Lec., by the longer antennæ, which reach to slightly beyond the hind angles. This species is distinguished from maclayi by the black elytra, shorter antennal process four and one-half times the length of the segment, the more expanded sides of the pronotum and the longer first tarsal segment of the middle legs which is longer than the following two. In maclayi the antennal processes are six times the length of the

segment, the sides of the pronotum are only slightly expanded and the first tarsal segment of the middle pair of legs is about as long as the following two.

For the sake of completeness it seems advisable to include Part 4 of Dr. Van Dyke's table modified to include the two species here described.

- 4. A. Median antennal processes more than five times as long as segments; length 13 mm. Palmdale, Calif....maclayi n. sp.
 - —. Median antennal processes less than five times as long as segments.

 B.

 - —. Prothorax with sides not expanded in front into wing-like processes, not as wide at middle as at hind angles....C.
 - C. Eyes large, almost hemispherical, sides of prothorax broadly feebly arcuate, elytral striæ well impressed, color brown; length 11 mm. Southern California.....schaumi Lec.
 - —. Eyes small, sides of prothorax suddenly strongly arcuate at middle, elytral striæ feebly impressed, color black; length 11 mm. Santa Paula, California......pullus n. sp.

Euthysanius brevis Sloop, new species

Robust, sub-parallel, rufous, shining, conspicuously clothed with short, reddish, erect pile. Head coarsely, closely punctured, and clothed with short, erect, rufous pile; eyes small, sub-hemisperical; antennæ not reaching hind angles. Median antennal processes two and one-half times as long as segment, entire antennæ clothed with long rufous pile, third segment but little longer than second. Pronotum slightly broader at middle than long, trapizoidal, shining, sides straight, slightly divergent to base; hind angles not divergent, carinate, short and obtuse; disk flat, coarsely, sparsely punctured, sides closely punctured. Scutellum elongate, obtuse at base and apex, slightly wider at base than apex, sparsely punctured and clothed with short, erect, rufous pile. Elytra almost three times as long as broad, entire surface clothed with short, erect, reddish pile especially at sides, shorter than abdomen, exposing the last two segments; sides gradually narrowing to apex, disk flattened, striæ feebly impressed at base, rather finely, closely punctured. Length 16 mm., width 5 mm.

Holotype, male (No. 3930, C. A. S. Ent.), and one paratype (in the collection of the author) taken in Sutter County, California, May 2, 1934, by Mr. E. R. Leach who very kindly presented the specimens to me.

The short elytra exposing the apex of the abdomen will separate brevis from all the known species of Euthysanius. This species runs to E. pretiosus Lec., in Dr. Van Dyke's' table, but is readily separated from that species by the trapizoidal pronotum, the small eyes, the straight-sided thorax and short, obtuse, non-divergent hind angles. In E. pretiosus Lec., the sides of the thorax are somewhat arcuate and the hind angles are longer, acute and carinate.

Recently I have received five specimens of *Plastocerus amplicollis* Van D.; all were collected in Kings County, California, three by Mr. F. W. Nunenmacher, and two by Mr. E. S. Ross.

Euthysanius lautus Lec., is a well known species taken throughout the southern part of California. Five specimens taken at Oxnard, California, June 10, 1934, by Mr. R. Kitchell, differ from typical lautus as follows: the antennal processes are shorter and the thoracic depressions are absent; there is also a slight difference in the length of the first tarsal segment of the hind legs and some variation in the shape of the pronotum.

The writer is indebted to Dr. E. C. Van Dyke, of the University of California and Mr. E. Gorton Linsley, of the same institution, for many helpful suggestions in the preparation of this paper.

A Convenient Pocket Book on Insects

We have recently received a copy of a new (third) edition¹ of Dr. Lutz' convenient little field book of insects. former editions this is of pocket size and contains over 500 pages of text and 100 plates. Of the latter 23 are colored, the reproductions being remarkably true to nature. All the orders of insects are covered without the one-sided emphasis on certain orders so often found in books of this character. included to most of the families and many of the genera, and under each is a short account of one or more of the better known species from the eastern states. On the Pacific Coast we still have to wait for a convenient pocket book such as this. Professor Essig's book on Western Insects is rather too large for convenient use in the field, although in these days of the automobile this handicap has much less significance than it once did. All things considered there probably is no better book to put into the hands of the young beginner than this little book by Dr. Lutz.

² Van Dyke, E. C., 1932, Proc. Calif. Acad. Sci., Ser. 4, XX, p. 154, ¹ Field Book of Insects. By Dr. Frank E. Lutz, 16mo., G. P. Putnams, \$3.50.